

IN THE CLAIMS

Please amend the claims as follows:

1. (Cancelled)
2. (Previously Presented) The method of claim 10, wherein generating the commands further comprises:

generating commands to maintain synchronous display of the interactive application with display of the broadcast program on a broadcast receiver.
3. (Previously Presented) The method of claim 10, wherein generating the commands further comprises:

generating commands to terminate display of the interactive application in synchrony with termination of the display of the broadcast program.
4. (Previously Presented) The method of claim 10, generating the commands further comprises:

determining from the control signals a state of the broadcast program; responsive to the state of the broadcast program, determining a state of the interactive application; and

generating at least one command appropriate to the state of the interactive application.

5. (Previously Presented) A computer implemented method of controlling the broadcast and reception of an interactive application, comprising:
 - receiving control signals that control the broadcast of broadcast programs;
 - determining from the control signals an interactive application associated with one of the broadcast programs; and
 - generating from the control signals, commands to maintain execution and termination of the interactive application in synchrony with either the display or the broadcast of the broadcast program, wherein the broadcast program is a television show, and wherein generating the commands further comprises:
 - determining from the control signals that a commercial is being broadcast;
 - responsive to determining that a commercial is being broadcast, generating a command to suspend execution of the interactive application associated with the television show; and
 - responsive to determining that the commercial is no longer being broadcast, generating a command to resume execution of the interactive application associated with the television program.
6. (Previously Presented) A computer implemented method of controlling the broadcast and reception of an interactive application, comprising:
 - receiving control signals that control the broadcast of broadcast programs;
 - determining from the control signals an interactive application associated with one of the broadcast programs; and
 - generating from the control signals, commands to maintain execution and termination of the interactive application in synchrony with either the display or the broadcast of the broadcast program , wherein the broadcast program is a first television show, and wherein generating the commands further comprises:
 - determining from the control signals that a commercial is being broadcast;
 - receiving a control signal to terminate the television show;

responsive to determining that a commercial is being broadcast, generating a command to suspend execution of the interactive application associated with the first television show; and

responsive to determining that the first television show is being broadcast after the commercial, generating a command to restart execution of the interactive application associated with the first television show.

7. (Previously Presented) A computer implemented method of controlling the broadcast and reception of an interactive application, comprising:
 - receiving control signals that control the broadcast of broadcast programs;
 - determining from the control signals an interactive application associated with one of the broadcast programs; and
 - generating from the control signals, commands to maintain execution and termination of the interactive application in synchrony with either the display or the broadcast of the broadcast program, wherein the broadcast program is a first television show, and wherein generating the commands further comprises:
 - determining from the control signals that a commercial is being broadcast;
 - receiving a control signal to terminate the television show;
 - responsive to determining that a commercial is being broadcast, generating a command to suspend execution of a first interactive application associated with the first television show; and
 - responsive to determining that the first television show is being broadcast after all the commercials in the commercial break, generating a command to restart execution of the first interactive application; and
 - responsive to determining that a second television show is being broadcast, generating commands to terminate the first interactive application and to begin execution of a second interactive application associated with the second television show.

8. (Previously Presented) A computer implemented method of controlling the broadcast and reception of an interactive application, comprising:

receiving control signals that control the broadcast of broadcast programs;
determining from the control signals an interactive application associated with one of the broadcast programs; and
generating from the control signals, commands to maintain execution and termination of the interactive application in synchrony with either the display or the broadcast of the broadcast program, wherein receiving control signals comprises receiving the control signals from a scheduling system by emulating a broadcast source device that is controlled by the scheduling system.

9. (Previously Presented) The method of claim 10, wherein each control signal is associated with a broadcast program, and wherein receiving control signals comprises:

translating the controls signals into a set of commands to an interactive application server for selectively instructing the server to schedule, start, stop, and cancel interactive applications for the broadcast programs associated with the control signals.

10. (Previously Presented) A computer implemented method of controlling the broadcast and reception of an interactive application, comprising:

receiving control signals that control the broadcast of broadcast programs;
determining from the control signals an interactive application associated with one of the broadcast programs; and
generating from the control signals, commands to maintain execution and termination of the interactive application in synchrony with either the display or the broadcast of the broadcast program, wherein the controls signals are generated by a scheduling system in response to a playlist defining a series of broadcast programs including program identifiers and information describing when the broadcast programs are to be broadcast.

11. (Previously Presented) A computer implemented method of controlling the broadcast and reception of an interactive application, comprising:

receiving control signals that control the broadcast of broadcast programs;

determining from the control signals an interactive application associated with one of the broadcast programs; and

generating from the control signals, commands to maintain execution and termination of the interactive application in synchrony with either the display or the broadcast of the broadcast program, wherein the controls signals are generated by a scheduling system in response to actions of an operator to manually control broadcast of a broadcast program.

12. (Previously Presented) The method of claim 10, wherein the controls signals are pre-recorded and stored in association with the broadcast programs that are controlled by the control signals.

13. (Previously Presented) The method of claim 10, further comprising:

receiving a prepare control signal to prepare the broadcast of a selected broadcast program;

determining an interactive application associated with the selected broadcast program;

generating a command to schedule execution of the determined interactive application.

14. (Previously Presented) The method of claim 10, further comprising:

receiving a start control signal to prepare the broadcast of a selected broadcast program;

determining an interactive application associated with the selected broadcast program;

generating a command to start transmission of the determined interactive application.

15. (Previously Presented) A computer implemented method of controlling the broadcast and reception of an interactive application, comprising:
 - receiving control signals that control the broadcast of broadcast programs;
 - determining from the control signals an interactive application associated with one of the broadcast programs; and
 - generating from the control signals, commands to maintain execution and termination of the interactive application in synchrony with either the display or the broadcast of the broadcast program, further comprising:
 - receiving a start control signal to prepare the broadcast of a selected broadcast program;
 - determining an interactive application associated with the selected broadcast program;
 - generating a command to start execution the determined interactive application by transmitting a trigger to an interactive application previously transmitted.
16. (Previously Presented) The method of claim 10, further comprising:
 - receiving a control signal to stop the broadcast of a selected broadcast program;
 - determining an interactive application associated with the selected broadcast program;
 - generating a command to cancel execution the determined interactive application.
17. (Previously Presented) The method of claim 10, further comprising:
 - determining a type of broadcast program for a control signal.
18. (Original) The method of claim 17, further comprising:
 - determining a type for an interactive application as a function of the type of the broadcast program.

19. (Previously Presented) The method of claim 10, further comprising:
 - determining a type of broadcast program for a control signal to be either a television show, a commercial, or unknown; and
 - determining a type of interactive application appropriate to the type of the broadcast program.
20. (Previously Presented) A computer implemented method of controlling the broadcast and reception of an interactive application, comprising:
 - receiving control signals that control the broadcast of broadcast programs;
 - determining from the control signals an interactive application associated with one of the broadcast programs; and
 - generating from the control signals, commands to maintain execution and termination of the interactive application in synchrony with either the display or the broadcast of the broadcast program, wherein a scheduling system provides controls signals to prepare, start, and stop a broadcast source, and further comprising:
 - in response to receiving a prepare signal for a broadcast program, generating a command to schedule an interactive application associated with the broadcast program, and generating a command to start the interactive application associated with the broadcast program;
 - ignoring a received start signal for the broadcast program where the command to start the interactive application associated with the broadcast program has already been generated; and
 - in response to receiving a stop signal for the broadcast program, generating a stop command to stop the interactive application associated with the broadcast program.

21. (Previously Presented) A computer implemented method of controlling the broadcast and reception of an interactive application, comprising:

receiving control signals that control the broadcast of broadcast programs;

determining from the control signals an interactive application associated with one of the broadcast programs; and

generating from the control signals, commands to maintain execution and termination of the interactive application in synchrony with either the display or the broadcast of the broadcast program, wherein a scheduling system provides controls signals which selectively distinguish television shows and commercials by the presence or absence of the identification codes in the controls signals, and further comprising:

in response to receiving a control signal containing an identification code indicating the broadcast of a commercial during a television show, generating a command to schedule an interactive application associated with the commercial, generating a command to start the interactive application, and determining if an interactive application for the television program is executing and generating a command to stop the execution of the interactive application for the television show; and

in response to receiving control signal not containing an identification code for a commercial, generating a command to cancel the interactive application associated with the commercial, and generating a command to start the interactive application.

22. (Previously Presented) A computer implemented method of controlling the broadcast and reception of an interactive application, comprising:

receiving control signals that control the broadcast of broadcast programs;

determining from the control signals an interactive application associated with one of the broadcast programs; and

generating from the control signals, commands to maintain execution and termination of the interactive application in synchrony with either the display or the broadcast of the broadcast program, wherein a scheduling system provides control signal

including data identifying each broadcast program and its duration, and further comprising:
generating commands to selectively schedule, start, stop, and cancel interactive applications associated with the broadcast programs using the identification data and the duration data from the control signals.

23. (Previously Presented) The method of claim 22, further comprising:
maintaining for each broadcast program which is associated with an interactive application a first state machine that responds to the controls signals to transition through states associated with the broadcast program, and that generates commands in selected states related to desired behavior for the interactive application for the state of the broadcast program; and
maintaining for the interactive application associated with the broadcast program a state machine that responds to the commands from the broadcast program's state machine that transitions through states associated with the interactive application, and which selectively generates the commands to maintain the synchronous execution of the interactive application with the broadcast program.

24. (Cancelled)

25. (Original) A computer program product for controlling execution of interactive applications for broadcast programs, comprising:

a plurality of channel interfaces, each channel interface coupled to receive control signals for a specific channel from a scheduling system that schedules the broadcast of broadcast programs on each of a plurality of channels, each channel interface further including a translator and an event manager;
the translator for a channel interface coupled to receive the control signals related to broadcast programs on the specific channel, and translate the control signals

into commands to the event manager, which commands depend on the state of broadcast programs broadcast on the specific channel; and

the event manager for a channel interface coupled to receive the commands from the translator and generate commands to a server to control the execution of interactive applications associated with broadcast programs on the specific channel.

26. (Original) The computer program product of claim 25, wherein:

the translator for a channel interface maintains a separate state machine for each uniquely identified broadcast program which has an interactive application;
and

the event manager for a channel interface maintains a separate state machine for each interactive application of broadcast programs on the specific channel.

27. (Cancelled)

28. (New) A computer implemented method of controlling the broadcast and reception of an interactive application, comprising:

receiving control signals that control the broadcast of broadcast programs;
determining from the control signals an interactive application associated with one of the broadcast programs; and
generating from the control signals, commands to maintain execution and termination of the interactive application in synchrony with either the display or the broadcast of the broadcast program.